

REMARKS

STATUS OF THE CLAIMS

In accordance with the foregoing, claims 1 and 3 have been amended. Claims 2 and 4 have been cancelled. New claim 5 has been added. Claims 1, 3 and 5 are pending and under consideration.

No new matter is being presented, and approval and entry of the amended and new claims are respectfully requested.

OBJECTION TO THE DRAWINGS

In the Office Action Summary, the Examiner checks box 10(b), indicating that the drawings are objected to; however, the Examiner provides no reasons for the objection in the Detailed Action.

It is respectfully submitted that the drawings show every feature of the invention specified in the claims, pursuant to 37 CFR 1.83. Furthermore, the drawings comply with all standards set forth in 37 CFR 1.84 (See also MPEP §608.02). Therefore, the objection should be withdrawn.

REJECTIONS OF CLAIMS 1-4 FOR OBVIOUSNESS UNDER 35 U.S.C. §103(a) AS BEING UNPATENTABLE OVER NIHEI ET AL. (U.S. PATENT NO. 5,489,758) IN VIEW OF DEGUCHI (JP 2002-351514)

The rejections of claims 1-4 are respectfully traversed and reconsideration is requested.

Claims 1 and 3 have been amended herein to include the recitations of dependent claims 2 and 4, respectively. Accordingly, claims 2 and 4 have been cancelled.

The present invention, according to claims 1 and 3, provides a laser machining robot with control means for controlling an acceleration of the laser machining robot movement not to exceed a preset maximum acceleration, and controlling a jerk not to exceed a preset maximum jerk during laser machining; and means for changing a laser machining condition according to a change in a moving velocity of said laser machining robot if the moving velocity is changed by a moving control exerted by the control means.

For example, the laser machining robot of the present invention is capable of changing the output of the laser generator in accordance with the acceleration and deceleration of the laser machining robot movement, to thereby carry out stable laser machining. (See page 11,

lines 16-25, of the Specification).

On the other hand, Nihei et al. merely teaches a laser robot having a height sensing device 13 arranged at a position close to a laser beam. Therefore, the robot of Nihei et al. is capable of correcting and maintaining a fixed distance between the workpiece and the laser beam projecting nozzle. (Abstract and column 1, lines 7-24).

Deguchi merely discloses a numerical controller that regulates acceleration and acceleration derivation of a movable shaft, to thereby allow smooth acceleration of the shaft. (Abstract).

Furthermore, the Examiner has provided no references disclosing means for changing a laser machining condition according to a change in a moving velocity of said laser machining robot if the moving velocity is changed by a moving control exerted by the control means, as recited in claims 1 and 3.

Therefore, it is respectfully submitted that claims 1 and 3 patentably distinguish over the prior art.

NEW INDEPENDENT CLAIM 5

New claim 5 is a method claim which recites, "controlling an acceleration of the laser machining robot movement not to exceed a preset maximum acceleration, and controlling a jerk not to exceed a preset maximum jerk during laser machining; and changing a laser machining condition according to a change in a moving velocity of said laser machining robot if the moving velocity is changed by a moving control."

As argued above for independent claims 1 and 3, the prior art fails to teach or even suggest these features. Thus, it is respectfully submitted that new claim 5 patentably distinguishes over the prior art.

CONCLUSION

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims patentably distinguish over the prior art. There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

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Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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